

Analysis of METRIC ET data

AFRD#2 and Northside Canal Co

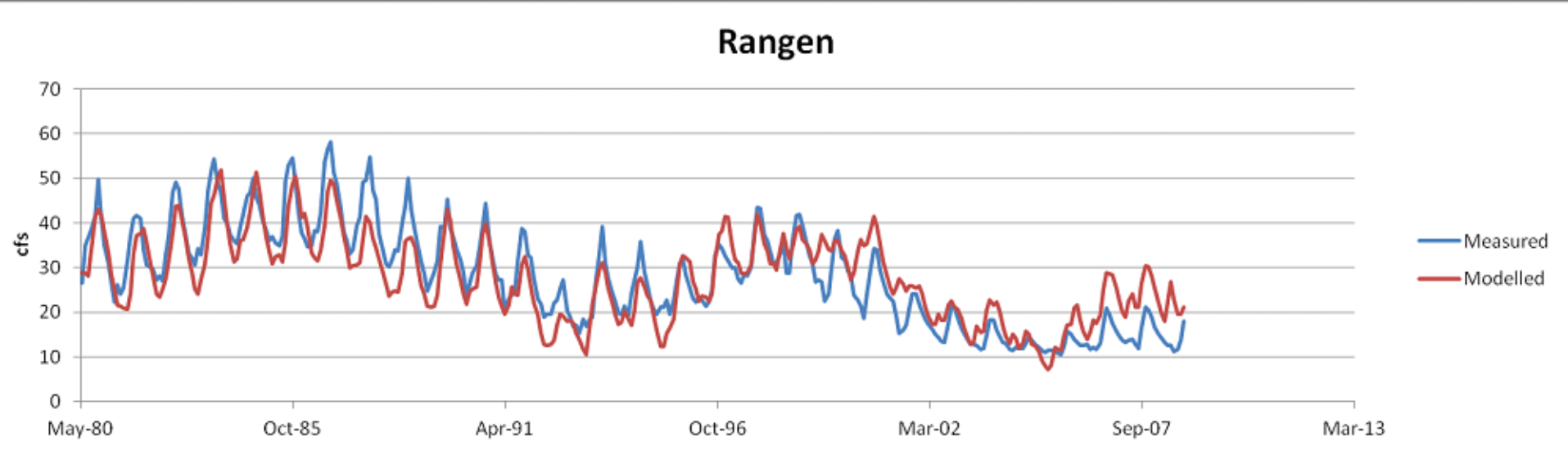
2000, 2002, 2006 and 2008

Bill Kramber

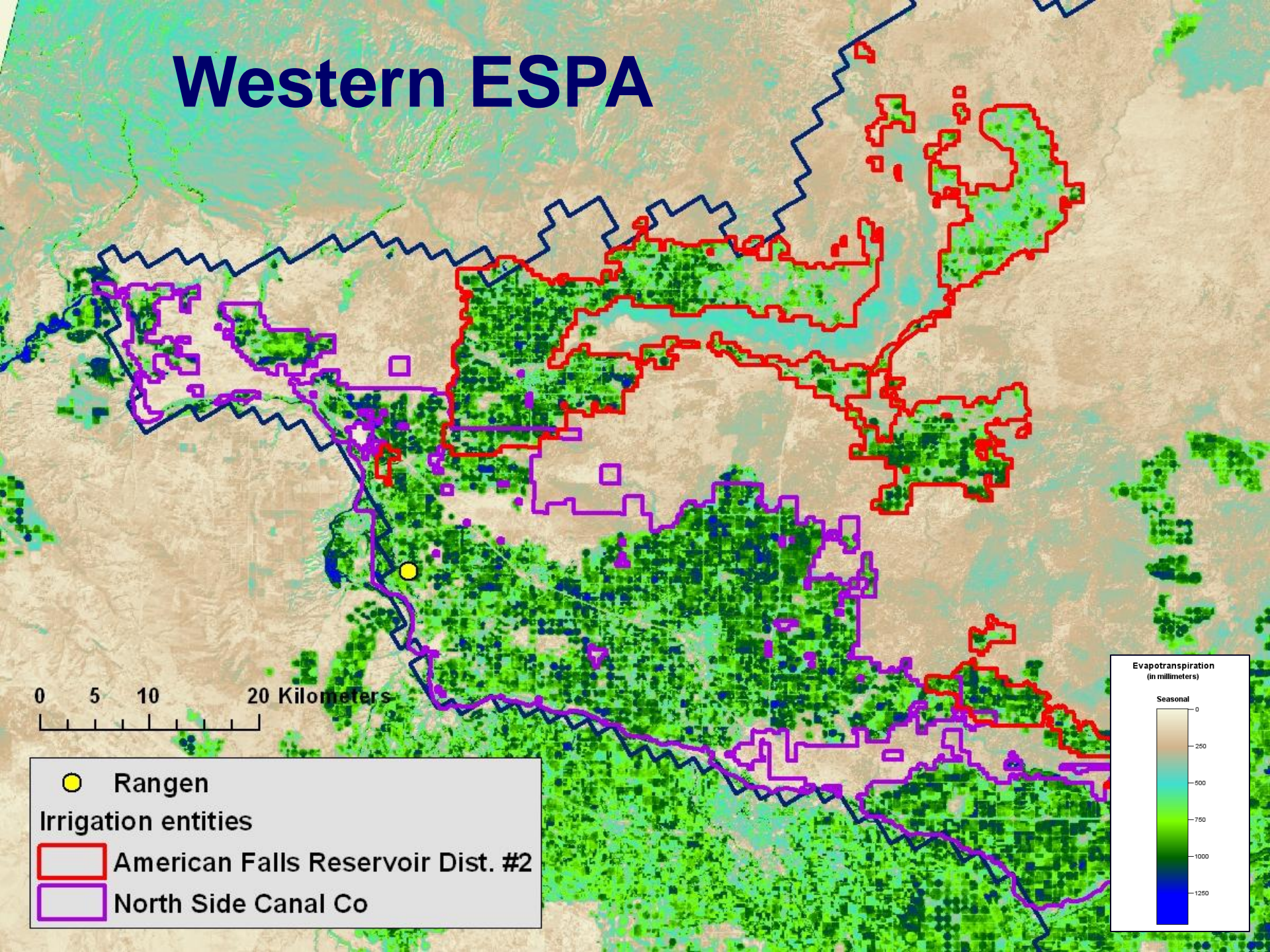
Idaho Department of Water Resources

Problem

- Large difference between modeled and measured spring flows from 2006 to 2008
- Could this be caused by changes in ET between 2006 and 2008?



Western ESPA



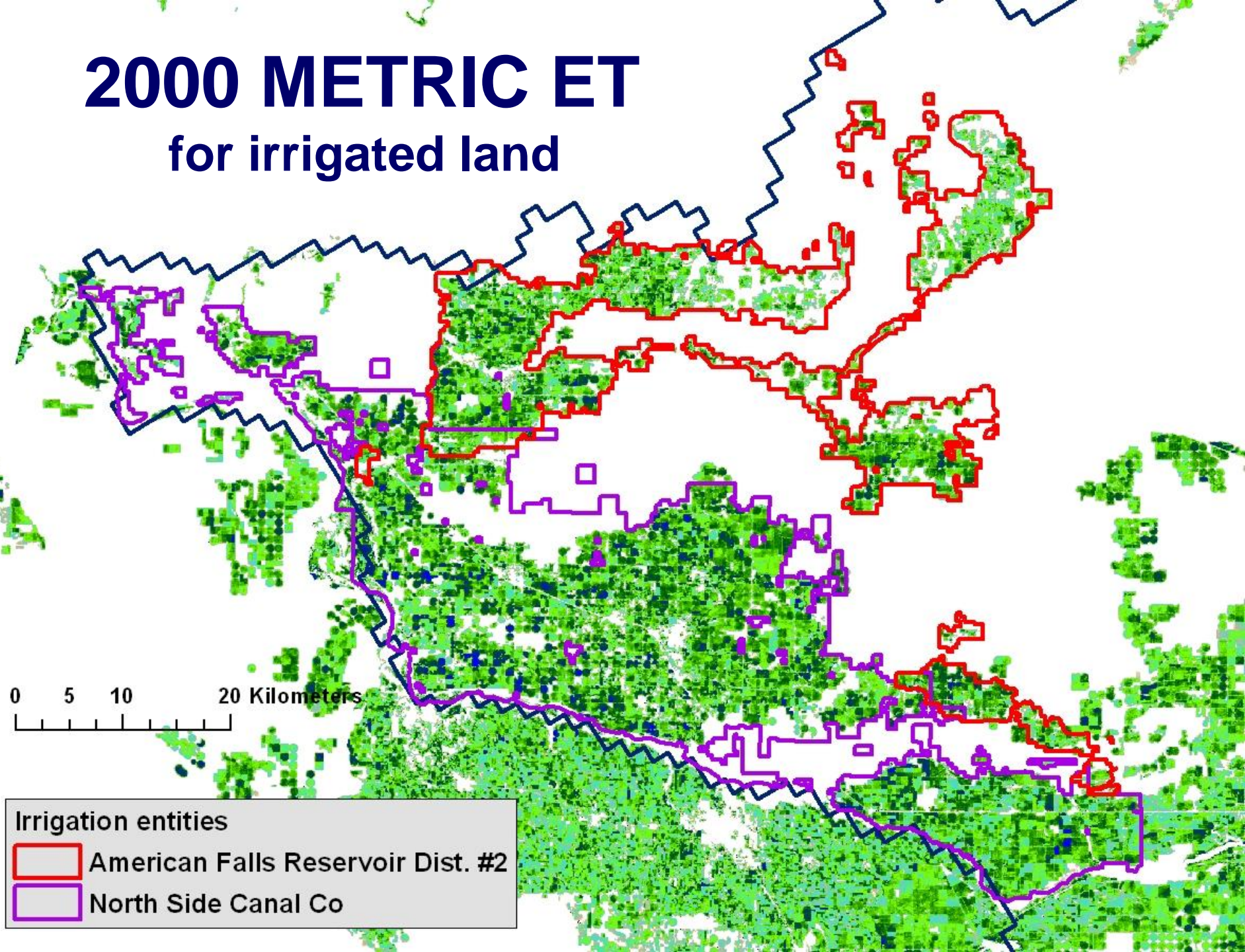
Analysis

METRIC ET for AFRD#2 and Northside Canal Co.

- 2000, 2002, 2006, 2008 seasonal ET
- Overlap areas treated as unique area
- Irrigated land layers for 2002, 2006, and 2008
 - Developed from CLU data
- Problem: irrigated land layer for 2000 is from a crop classification of Landsat data--not from CLU

2000 METRIC ET

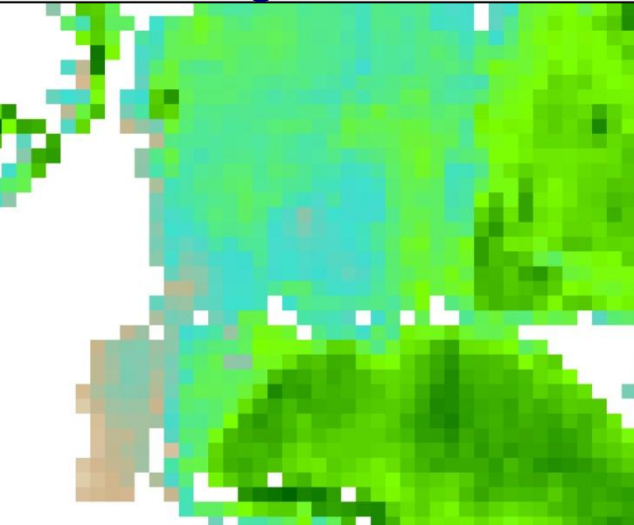
for irrigated land



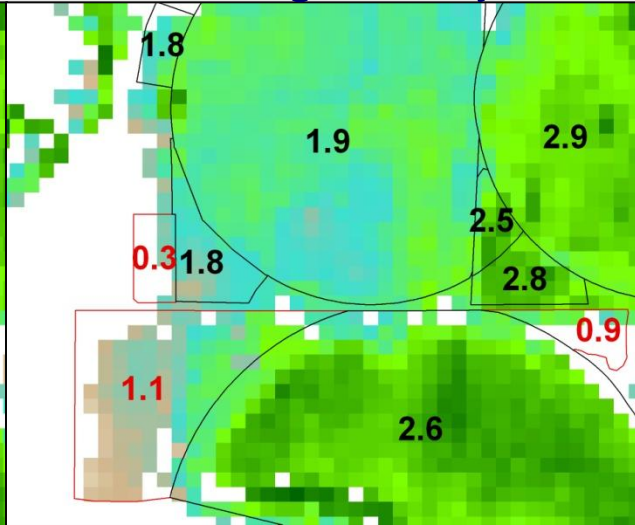
Solution

- Developed a preliminary irrigated land layer for 2000 from CLU to be consistent with other years
- Refined 2002 irrigated land layer
- Eliminated polygons with ET < 1.5 ac-ft/acre

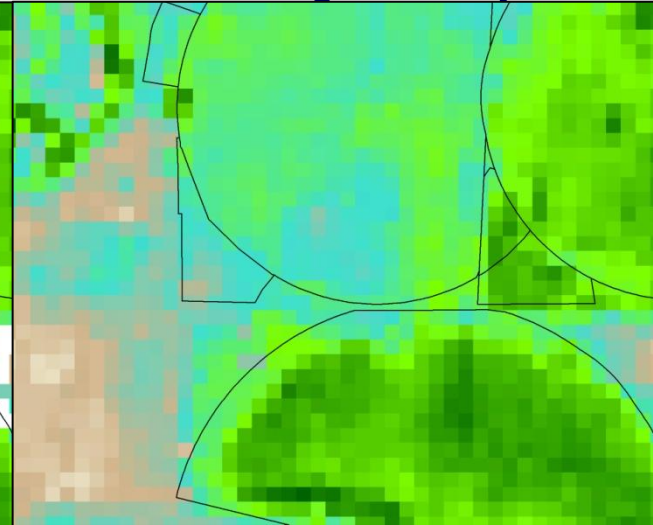
2000 Irrigated land ET



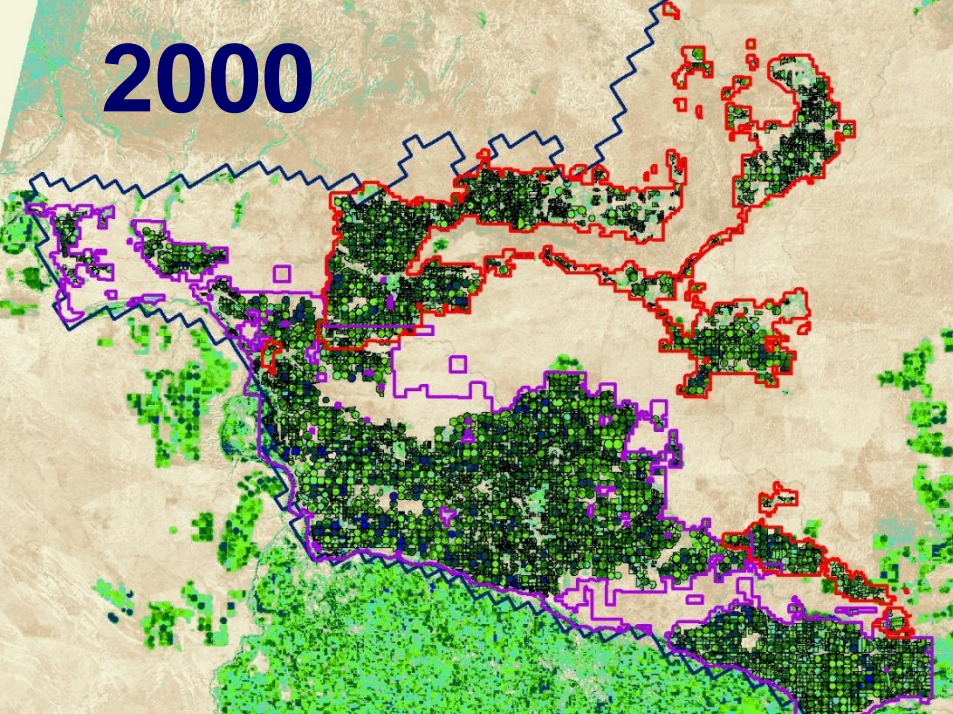
2002 Irrigated layer



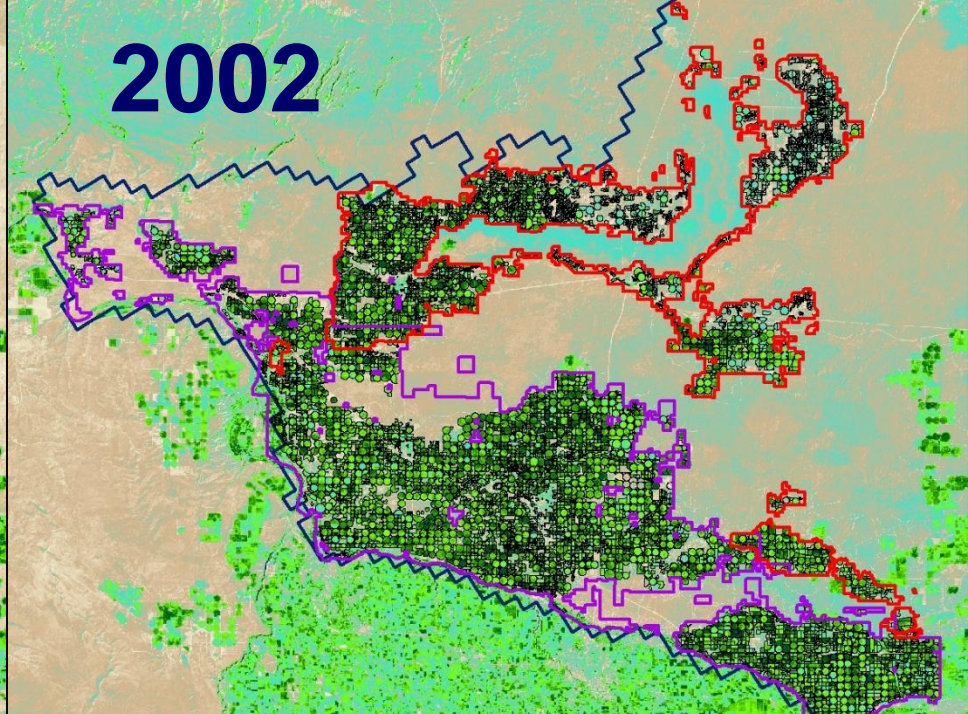
2000 Irrigated layer



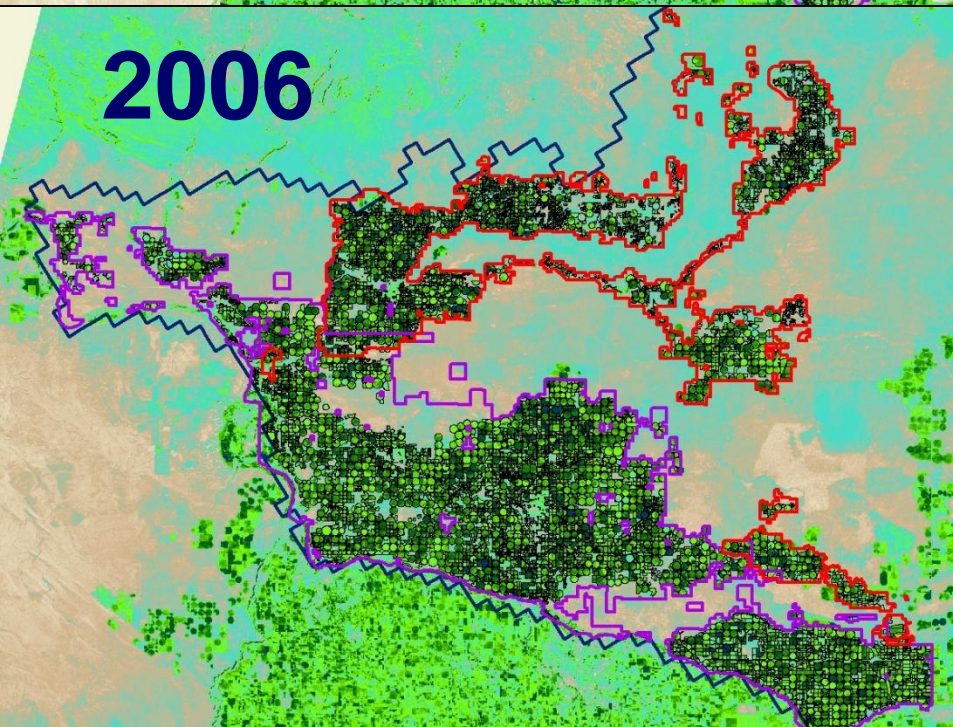
2000



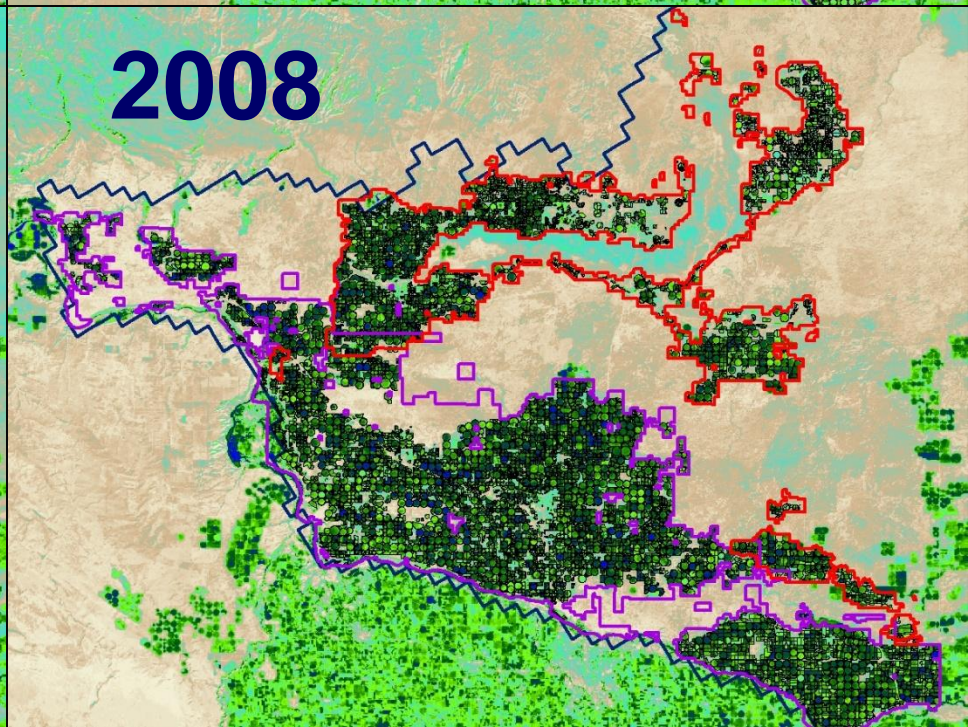
2002



2006



2008



METRIC ET for Irrigated Land by Irrigation Entity

Irrigation Entity	Mean ET mm	Acres	ET Volume ac-ft	ET ac-ft/acre
2000				
American Falls Reservoir Dist #2	815	86,932	232,592	2.68
North Side Canal Co LTD	859	204,558	576,611	2.82
Irrigation Entities Overlap Area	828	5,146	13,971	2.72
Total		296,636	823,175	2.78
2002				
American Falls Reservoir Dist #2	657	97,590	210,332	2.16
North Side Canal Co LTD	768	210,827	530,939	2.52
Irrigation Entities Overlap Area	779	5,389	13,775	2.56
Total		313,805	755,046	2.41
2006				
American Falls Reservoir Dist #2	796	100,004	261,306	2.61
North Side Canal Co LTD	831	215,011	586,337	2.73
Irrigation Entities Overlap Area	837	5,385	14,795	2.75
Total		320,399	862,438	2.69
2008				
American Falls Reservoir Dist #2	843	91,441	252,816	2.76
North Side Canal Co LTD	915	206,796	620,615	3.00
Irrigation Entities Overlap Area	927	5,109	15,545	3.04
Total		303,346	888,975	2.93

Note: The analysis used final irrigated land use data for 2002, 2006, and 2008, and preliminary irrigated land use data for 2000.

Total ET Volume ac-ft

